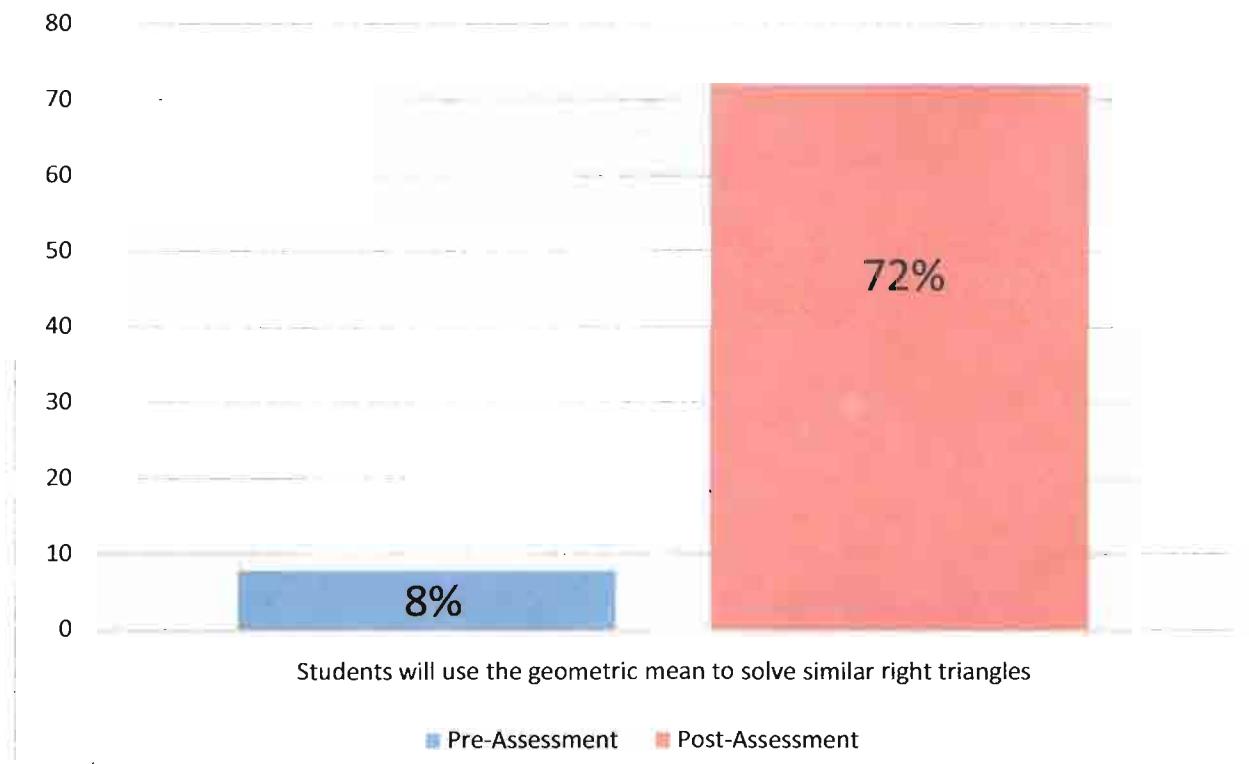


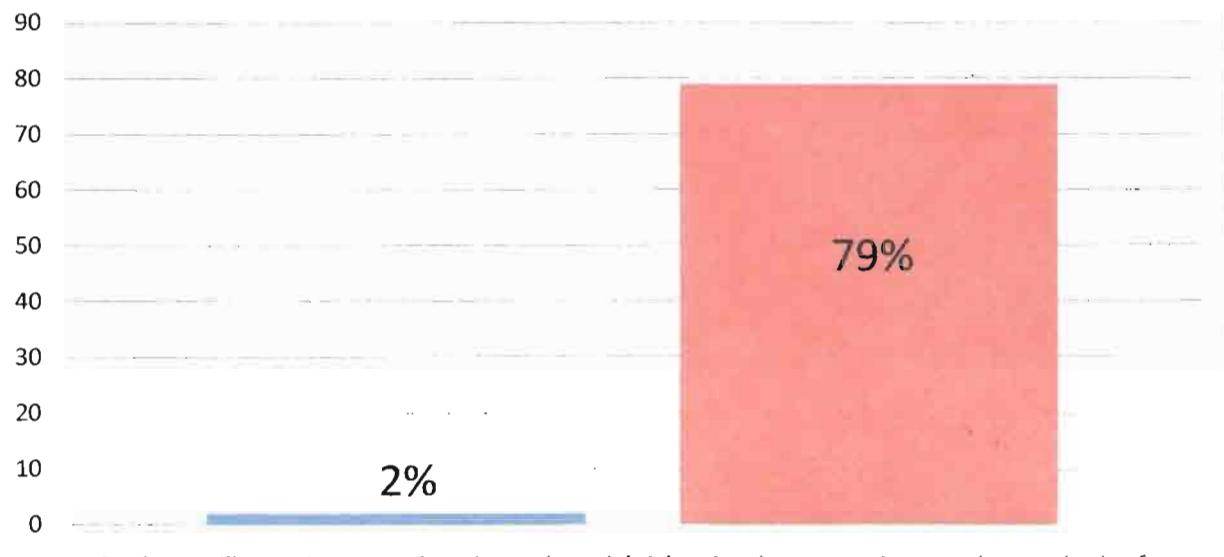
## Analysis of Student Learning

The unit that was completed at Rhodeham High School was on Trigonometric Ratios, taught in the context of a tenth grade Geometry class. Overall, I will analyze the progress of the class by comparing the results of the Pre-assessment and the Post-assessment for each unit objective. I will also investigate the results of a subgroup by comparing genders to see if any gender bias existed in my instruction. This section is intended to show the progress made by the class as whole towards achieving the unit objectives.

### **Unit Objective One**



## Unit Objective Two



Students will use trigonometric ratios and special right triangles to write equations and solve for missing sides in a triangle

■ Pre-Assessment ■ Post-Assessment

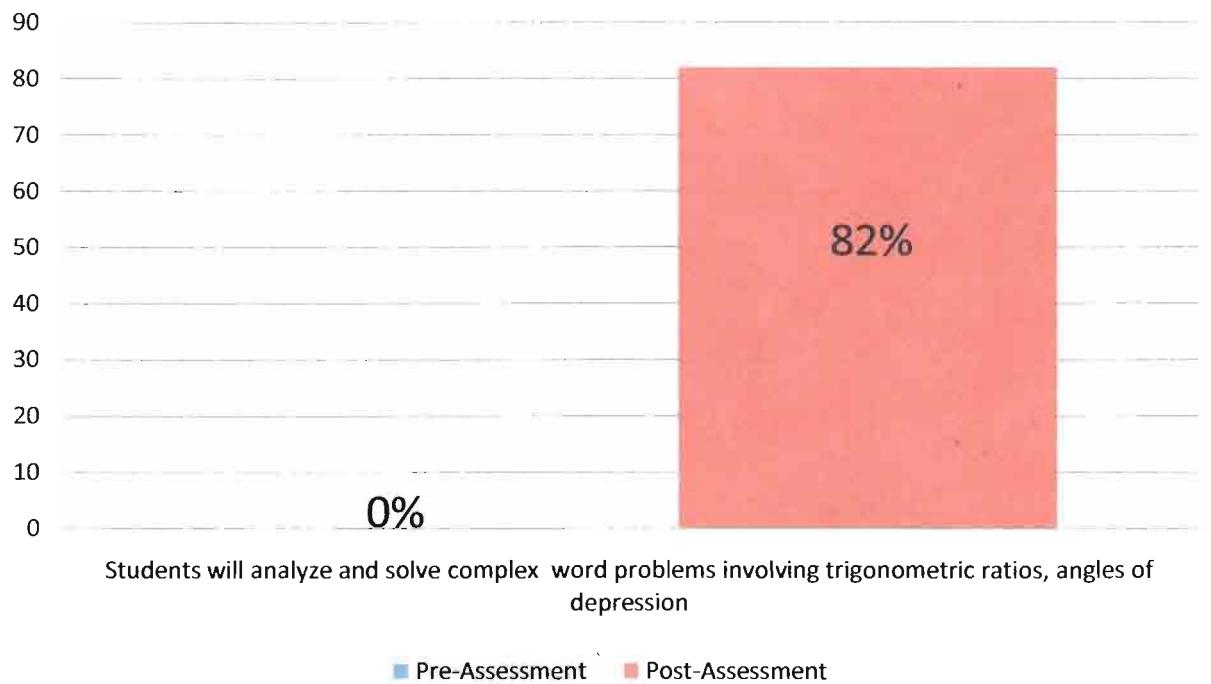
## Unit Objective Three



Students will use the inverse trigonometric functions to solve for angle measures in right triangles

■ Pre-Assessment ■ Post-Assessment

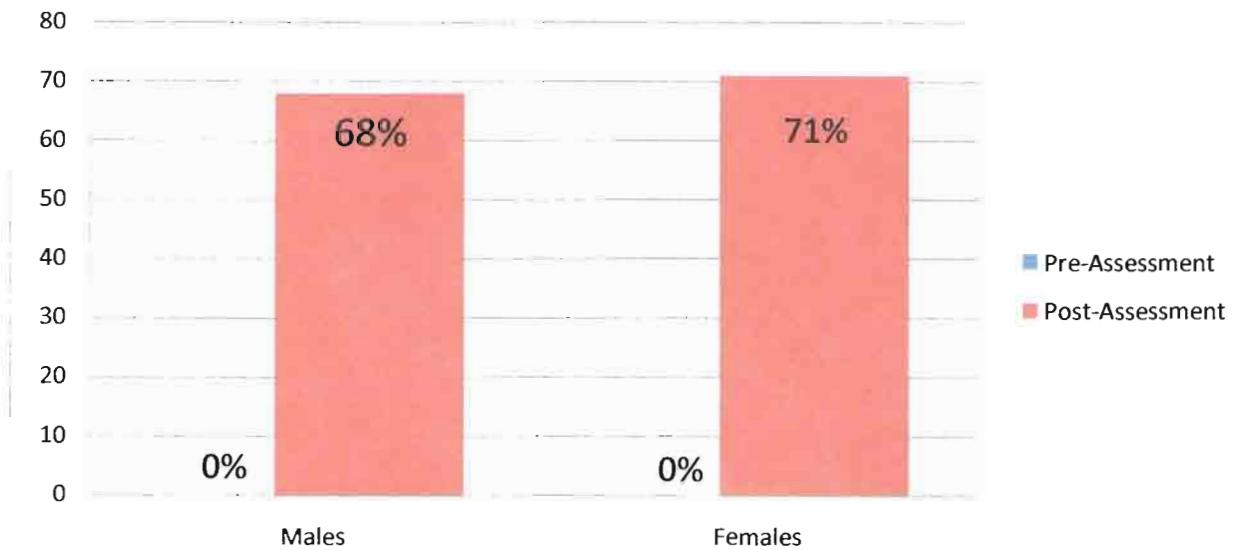
## Unit Objective Four



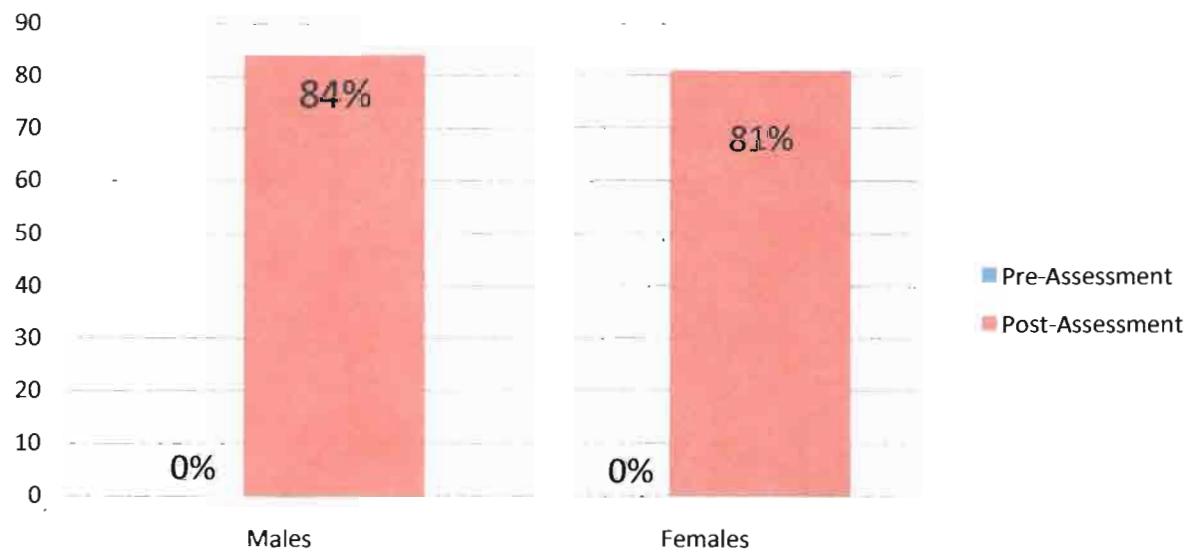
For each of the unit objectives the students made significant progress. The class average on the Post-assessment was 77%. This average was short of my goal of 80% but I was satisfied with the amount of progress the class had made. The highest average for the unit objectives was for the fourth objective involving solving word problems about angles of depression and elevation. This higher average may be due to the fact that this was the last content that the students encountered before the test and so perhaps it was fresh in their mind. This was also the main unit objective addressed in the performance task so this may speak to the effectiveness of a performance task in reinforcing material. The lowest average out of the unit objectives was for unit objective three, which dealt with inverse trigonometric functions. In my experience, students often have trouble with the concept of an inverse function, and this appears to be the case in this unit.

The subgroup that I decided to analyze is males versus females. I will look at the unit objectives three and four. Overall, the data shows the improvement for each gender was similar.

### **Unit Objective Three**



### **Unit Objective Four**



The differences between genders were minimal, with both subgroups performing at nearly the same rate. The females were in the majority in the class but that did not seem to have an effect on the performance. Males and females worked together during group and were very cooperative.

The average for the males on the Post-assessment was a 74% and the average for the females was 78%. Though the females did slightly better, the differences are not statistically significant. The data shows that the unit was without gender bias and that both groups performed at the same level.

Judging from this analysis, significant progress was made towards reaching all students in the class room. Three students failed the test and four students received a ninety or higher. One student had a perfect test score. I could have done a better job to reach the four students who failed. One of the students came for extra help after school, had completed homework, but claimed to have test anxiety and said that she froze up when faced with a test. I would have liked more time to work with this particular student and attempt to get to the root of her test anxiety. The other failing students had little to no completed homework. In retrospect, I should have been more pro-active in getting these students to come for extra help and I should have tried other ways to motivate them. I was disappointed to see these students fail to meet the unit objectives but thankfully they were in the minority. Overall, some students excelled, four students failed and the rest made adequate progress towards the unit objectives. I learned from this unit the difficulty of reaching the unmotivated student. In the future, I will have to work harder to ensure that my instruction reaches the entire class and certain students do not fall through the cracks. I would rate this instruction as moderately effective.